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Time Sensitive Emergency System Standards Manual

State of Idaho

Authority: Sections 56-1024 through 56-1030, Idaho Code

IDAHO DEPARTMENT OF HEALTH & WELFARE

Time Sensitive Emergency Council
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I. DEFINITIONS

The following terms used in this manual as defined below:

Heart attack. STEMI, which is a common name for ST-elevation myocardial infarction, a more precise definition for a type of heart attack that is caused by a prolonged period of blocked blood supply that affects a large area of the heart and has a substantial risk of death and disability calling for a quick response.

Regional Time Sensitive Emergency (TSE) Committee. A regional TSE committee established under Section 56-1027, Idaho Code.

Stroke. An interruption of blood flow to the brain causing paralysis, slurred speech and/or altered brain function usually caused by a blockage in a blood vessel that carries blood to the brain (ischemic stroke) or by a blood vessel bursting (hemorrhagic).

Trauma. The result of an act or event that damages, harms, or hurts a human being resulting in intentional or unintentional damage to the body resulting from acute exposure to mechanical, thermal, electrical, or chemical energy, or from absence of such essentials as heat or oxygen.

TSE Designated Center. A facility that has voluntarily applied for TSE designation, met and is in compliance with the designation criteria and standards of these rules when published, and that the TSE Council has designated as one (1) or more of the following:

a. Trauma
   (1) Adult Level I Trauma Center;
   (2) Adult Level II Trauma Center;
   (3) Adult Level III Trauma Center;
   (4) Adult Level IV Trauma Center;
   (5) Adult Level V Trauma Center;
   (6) Pediatric Level I Trauma Center; or
   (7) Pediatric Level II Trauma Center.
b. Stroke (when published)
   (1) Comprehensive Stroke Center
   (2) Primary Stroke Center
   (3) Acute Stroke Ready Center
c. STEMI (Heart Attack) (when published)
   (1) Receiving STEMI Center
   (2) Referring STEMI Center

TSE system. Under Section 57-2002, Idaho Code, The organized approach to treating injured patients that establishes and promotes standards for patient transportation, equipment, and information analysis for effective and coordinated TSE care. TSE systems represent a continuum of care that is fully integrated into the emergency medical services system and is a coordinated effort between out-of-

hospital providers with the close cooperation of medical specialists in each phase of care. The focus is on prevention, coordination of acute care, and aggressive rehabilitation. Systems are designated to be inclusive of all patients with a TSE requiring acute care facilities, striving to meet the needs of the patient, regardless of the severity of injury, geographic location or population density. A TSE system seeks to prevent injuries from happening and the reduction of death and disability when they do happen.

II. TSE STANDARDS MANUAL AUTHORITY

The Idaho Time Sensitive Emergency System Council is authorized under Section 56-1028, Idaho Code, to promulgate rules for the purpose of establishing standards and for the administration of a voluntary time sensitive emergency system of care.

III. REFERENCED DOCUMENTS

- American College of Surgeons, Resources for the Optimal Care of the Injured Patient, 2006

IV. TSE REGIONS

TSE Regions

There are six TSE regions.

- **Region 1 – North**. The counties of Benewah, Bonner, Boundary, Kootenai, Latah, and Shoshone.
- **Region 2 – North Central**. The counties of Clearwater, Idaho, Latah, Lewis and Nez Perce.
- **Region 3 – Southwest**. The counties of Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington.
- **Region 4 – South Central**. The counties of Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls.
- **Region 5 – Southeast**. The counties of Bannock, Bear Lake, Bingham, Caribou, Cassia, Franklin, Minidoka, Oneida, and Power.
- **Region 6 – East**. The counties of Bingham, Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, and Teton.

The specific procedures to request realignment of regions can be found section 81 of the Rules of the Idaho Time Sensitive Emergency System Council. Refer to Section 56-1030, Idaho Code for detailed description of the Regional TSE Committee functions.

V. APPLICATION PROCESS

General Information

A facility applying for initial designation as a TSE designated facility must apply for each designation by submitting the following to the TSE:

- A completed application for each designation being sought;
- A non-refundable TSE site survey fee; and
- Scheduling a site survey as applicable.

Fees

The designation fees are for a three (3) year designation and are payable on an annual basis.

Trauma Designations	**Designation Fee 3-years/Annual (Not to exceed)**	**TSE On-Site Survey Fee (Not to exceed)**
Level I	$45,000/$15,000	$3,000 (Not applicable if using ACS verification)
Level II	$36,000/$12,000	$3,000 (Not applicable if using ACS verification)
Level III	$24,000/$8,000	$3,000 (Not applicable if using ACS verification)
Level IV	$12,000/$4,000	$1,500 (Not applicable if using ACS verification)
Level V	$3,000/$1,000	$1,500
Pediatric Level I and Level II	$36,000/$12,000	Not applicable because of ACS verification

Site Survey

A TSE Council site survey may include:

- A review of the facility's application;
- Chart review based on the facility's application;
- Inspection of equipment pertaining to the designation being sought;
- Review of policies and procedures pertaining to the designation being sought;
- A physical inspection of the facility;
- Interviews with facility staff and review of staff credentials;
- A review of the facility's protocols and call schedules;
- A review of transfer protocols; and
- A review of the facility's planned interaction with pre-hospital transport.

Survey Team

A TSE Council approved site survey team may include:

A physician reviewer:

- will be certified by the American Board of Medical Specialties or the American Board of Osteopathic Medicine;
- will be board certified in the specialty area he/she is representing on the review team;
- be currently active in trauma, stroke or emergency cardiac care at a center that is at or above the level being reviewed;
- for Trauma Level I and Level II, be from out-of-state; and
- Have no conflict of interest with the center under review.

Nurse Reviewer and/or Program Manager:

- be currently active in trauma, stroke or emergency cardiac care at a center that is at or above the level being reviewed;
- for Trauma Level I and Level II, be from out-of-state; and
- have no conflict of interest with the center under review.

The procedures to notify the TSE Council of a potential conflict of interest with a specific reviewer can be found in section 251 of the Rules of the Idaho Time Sensitive Emergency System Council.

Waivers, Denials, Modification, Revocation and Suspension

Procedures for applying for a waiver or for submitting an appeal can be found in the TSE Rules, sections 270-285.

VI. TRAUMA DESIGNATION

Level I, II, III & Level IV

Hospitals seeking Level I, II, III or Level IV trauma designation have the choice to use the ACS or the State of Idaho to verify their compliance with the standards published in the ACS document: Resources for the Optimal Care of the Injured Patient, 2006, or with standards incorporated by the TSE Council for state designation.

To apply for Level I, II, III or Level IV, using the ACS to verify compliance, the following is required:

- A completed application;
- A copy of the pre-review questionnaire (PRQ) from the ACS; and
- A copy of the ACS site review

To apply for Level I, II, III or Level IV, using the Idaho TSE Council to verify compliance, the following is required:

- A completed application;
- A non-refundable site survey fee; and
- Schedule a site survey.

A hospital applying for initial designation that is using the Idaho TSE Council to verify compliance must have a TSE Council approved survey team evaluation prior to initial designation as a TSE designated facility as a Level I, II, III or Level IV trauma center. The hospital must meet or exceed the designation criteria in Appendix A.

Once verified by the ACS or the Idaho TSE Council, and approved by the TSE Council, the center will be designated for three (3) years, unless the designation is rescinded by the TSE Council for non-compliance to the TSE Council's rules. Designation fee for year one must be paid prior to receipt of the designation from the TSE Council. Yearly designation fees must be submitted within thirty (30) days of receipt of invoice in order to maintain designation.

Any TSE designated center that has a loss of certification or licensure will immediately notify the TSE Council.

A TSE designated Level III or Level IV trauma center requesting renewal of their designation must:

- Submit a renewal application three months prior to the expiration date of the previous designation;
- Submit TSE site survey fee, if applicable, and
- Submit a copy of the full ACS report detailing the results of the ACS site visit; or
- Schedule a site visit from a TSE Council approved survey team. (Designation will not be rescinded due to a delay in scheduling the site visit if the delay is through no fault of the facility.)

Level V

A hospital, free standing emergency department, or rural clinic seeking Level V trauma designation must undergo the Idaho TSE Council verification to demonstrate compliance with the standards incorporated by that council.

To apply for Level V, the following is required:

- A completed application;
- TSE site survey fee; and
- Schedule a site survey.

A facility applying for initial designation must have a TSE Council approved survey team evaluation prior to initial designation as a TSE designated facility as a Level V trauma center. The facility must meet or exceed the designation criteria in Appendix A.

Once verified, the center will be designated for three (3) years, unless the designation is rescinded by the TSE Council for non-compliance with the rules and/or standards. Designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) for any reason will immediately notify the TSE Council.

A TSE designated Level V Trauma Center requesting renewal of their designation must:

- Submit a renewal application within three months of the expiration date of the previous designation;
- Submit TSE site survey fee; and
- Schedule a site visit from a TSE Council approved survey team. (Designation will not be rescinded due to a delay in scheduling the site visit if the delay is through no fault of the facility.)

Pediatric Trauma

Hospitals seeking Pediatric Level I or II Trauma Center designation must undergo the American College of Surgeons' (ACS) verification to demonstrate compliance with the corresponding standards published in the ACS document: Resources for Optimal Care of the Injured Patient, 2006 or 2015 as applicable.

To apply for Pediatric Level I or II Trauma Center, the following is required:

- A completed application;
- A copy of the pre-review questionnaire (PRQ) submitted to the ACS; and
- A copy of the ACS site survey.

Once verified by the ACS, and approved by the TSE Council, the center will be designated for three (3) years, unless the designation is rescinded by the TSE Council for non-compliance to the TSE Council's rules.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) for any reason will immediately notify the TSE Council.

A TSE designated Pediatric Level I or II Trauma Center requesting renewal of their designation must:

- Submit a renewal application;
- Be verified by the ACS 3 months prior to the expiration date of previous designation; and
- Submit a copy of the full ACS report detailing the results of the ACS site visit.

VII. APPENDIX A: DESIGNATION REQUIREMENTS

Level I Trauma Center

Designation Criteria for Level I Trauma Center

Criteria for designation of Level I trauma centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.* Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level I trauma center in Idaho.

Criteria Element
1. Trauma Systems
1.1 There is sufficient involvement by the hospital trauma program staff in state/regional trauma system planning, development, and/or operation.
2. Description of Trauma Centers and Their Roles in a Trauma System
2.1 There is surgical commitment to the trauma center.
2.2 All trauma facilities are on the same campus.
2.3 The Level I trauma center meets admission volume performance requirements.
2.4 The trauma director has a responsibility and authority for determining each general surgeon's ability to participate on the trauma panel through the trauma PIPS program and hospital policy.
2.5 General surgeon or appropriate substitute is available for major resuscitations in house 24 hours a day.
2.6 The PIPS program has defined conditions requiring the surgeon's immediate hospital presence.
2.7 The 80% compliance of the surgeon's presence in the ED is confirmed and monitored by PIPS (30 minutes).
2.8 The trauma surgeon on call is dedicated to the trauma center wall on duty.
2.9 A published backup call schedule for trauma surgery is available.
2.10 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.11 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.12 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
3. Prehospital Trauma Care
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma surgeon is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
4. Interhospital Transfer
4.1 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.

4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient, for example, payment is not considered.
5. Hospital Organization and the Trauma Program
5.1 The hospital has the commitment of the institutional governing body and the medical staff to become a trauma center.
5.2 There is a current resolution supporting the trauma center from the hospital board.
5.3 There is a current resolution supporting the trauma center from the medical staff.
5.4 The multidisciplinary trauma program continuously evaluates its process and outcomes to insure optimal and timely care.
5.5 The trauma medical director is a board-certified surgeon or an ACS Fellow.
5.6 The trauma medical director participates in trauma call.
5.7 The trauma director is current in ATLS.
5.8 The trauma director is both a member and an active participant in a national or regional trauma organization.
5.9 The trauma director has the authority to correct deficiencies in trauma care or to exclude from trauma call the trauma team members who do not meet specified criteria.
5.10 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
5.11 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
5.12 Seriously injured patients are admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers.
5.13 There is sufficient infrastructure and support to the trauma service to ensure adequate provision of care.
5.14 In teaching facilities, the requirements of the Residency Review Committee are met.
5.15 The trauma program manager shows evidence of educational preparation (a minimum of 16 hours of trauma-related continuing education per year) and clinical experience of injured patients.
5.16 There is a multidisciplinary peer review committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
5.17 Adequate (>50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
5.18 The core group is adequately defined by the trauma medical director.
5.19 The core group takes at least 60% of the total trauma call hours each month.
5.20 The trauma director ensures and documents dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.
5.21 There is a Trauma Program Operational Process Performance Improvement Committee.
6. Clinical Functions: General Surgery
6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements
6.2 The general surgeon is board-certified and meets the Alternative Pathway and is an ACS Fellow.
6.3 The trauma surgeon has privileges in general surgery.
6.4 The trauma surgeon on call is dedicated to the trauma center while on duty.

6.5 A published backup call schedule for trauma surgery is available.
6.6 An attendance threshold of 80% is met for trauma surgeon presence in the ED.
6.7 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.
6.8 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.
6.9 There is a multidisciplinary peer review committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.10 Adequate (at least 50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
6.11 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
6.12 The trauma medical director has documented 16 hours annually or 48 hours in three years of verifiable, external trauma related CME.
6.13 Other trauma surgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME or an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
6.14 The trauma medical director is a member and participates in regional or national trauma organizations.
7. Clinical Functions: Emergency Medicine
7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
7.2 ED physicians are present in the ED at all times.
7.3 In institutions in which there are emergency medicine residency training programs, supervision is provided by an in-house attending emergency physician 24 hours per day.
7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the director of trauma services.
7.5 An emergency physician is board-certified and meets the Alternate Pathway.
7.6 Emergency physicians on the call panel are regularly involved in the care of injured patients.
7.7 A representative from the ED participates in the prehospital PIPS program.
7.8 A designated emergency physician is available to the trauma director for PIPS issues that occur in the ED.
7.9 There is emergency physician participation with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee (dealing with systems issues).
7.10 The emergency medicine representative or designee to the multidisciplinary peer review committee attends a minimum of 50% of these meetings.
7.11 The emergency physician liaison representative has the documented 16 annually or 48 hours in 3 years of verifiable, external trauma-related CME.
7.12 Other emergency physicians who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
7.13 There are emergency physicians who have successfully completed the ATLS course.

7.14 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.
8. Clinical Functions: Neurosurgery
8.1 A neurosurgical liaison is designated.
8.2 Neurotrauma care is promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.
8.3 The hospital provides an on-call neurosurgical backup schedule with formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed.
8.4 There is a PIPS review of all neurotrauma patients who are diverted or transferred.
8.5 An attending neurosurgeon is promptly available to the hospital's trauma service when the neurosurgical consultation is requested.
8.6 The neurosurgeons who care for trauma patients are board-certified and meet the Alternate Pathway.
8.7 Qualified neurosurgeons are regularly involved in the care of head- and spinal cord- injured patients and are credentialed by the hospital with general neurosurgical privileges.
8.8 The neurosurgery service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
8.9 The neurosurgeon representative attends a minimum of 50% of the multidisciplinary peer review committee meetings.
8.10 The neurosurgeon liaison representative has the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
8.11 Other neurosurgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
9. Clinical Functions: Orthopedic Surgery
9.1 Physical and occupational therapists and rehabilitation specialists are present.
9.2 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.3 A mechanism to ensure operating room availability without undue delay for patients with semi urgent orthopedic injuries.
9.4 There is an orthopedic surgeon who is identified as the liaison to the trauma program.
9.5 Plastic surgery, hand surgery, and spinal injury care capabilities are present.
9.6 Orthopedic team members have dedicated call at their institution and a backup call system.
9.7 An orthopedic team member is promptly available in the trauma resuscitation area when consulted by the surgical trauma team leader for multiple injured patients.
9.8 The design of the backup call system, the responsibility of the orthopedic trauma liaison, has been approved by the trauma program director.
9.9 Provide sufficient resources, including instruments, equipment, and personnel, for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures.

9.10 The orthopedic service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
9.11 The orthopedic trauma liaison or representative attends a minimum of 50% of the multidisciplinary peer review meetings.
9.12 Orthopedic surgeons who care for injured patients are board-certified and meet the Alternate Pathway.
9.13 The orthopedic surgeon has privileges in general orthopedic surgery.
9.14 The orthopedic surgical liaison to the trauma program has documented at least 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
9.15 The orthopedic trauma team member has documentation of the acquisition of 16 hours of CME per year on average and has participated in an internal educational process conducted by the trauma program and the orthopedic liaison based on the principles of practice-based learning and the PIPS program.
10. Collaborative Clinical Services
Anesthesia
10.1 Anesthesia services are promptly available for emergency operations.
10.2 Anesthesia services are promptly available for airway problems.
10.3 There is an anesthesiologist liaison designated to the trauma program.
10.4 Anesthesia services are available in-house 24 hours a day.
10.5 When anesthesiology chief residents or CRNAs are used to fulfill availability requirement, the staff anesthesiologist on call is (1) advised, (2) promptly available at all times, and (3) present for all operations.
10.6 The availability of the anesthesia services and the absence of delays in airway control or operations are documented in the hospital PIPS process.
10.7 All anesthesiologists taking call have successfully completed a residency program.
10.8 The anesthesia liaison is identified.
10.9 The anesthesia representative participates in the trauma PIPS program.
10.10 The anesthesia representative or designee to the trauma program attends at least 50% of the multidisciplinary peer review meetings.
Operating Room
10.11 The operating room is adequately staffed and immediately available.
10.12 The operating room team does not have functions requiring its presence outside the operating room.
10.13 There is a mechanism for providing additional staff for a second operating room when the first operating room is occupied.
10.14 The operating room has the essential equipment.
10.15 Trauma centers have the necessary equipment for a craniotomy.
10.16 The trauma center has cardiopulmonary bypass and an operating microscope available 24 hours per day.
Post anesthesia Care Unit (PACU)
10.17 The PACU has qualified nurses available 24 hours per day as needed during the patient's post anesthesia recovery phase.

10.18 The PACU is covered by a call team from home with documentation by the PIPS program that nurses are available and delays are not occurring.
10.19 The PACU has the necessary equipment to monitor and resuscitate patients.
10.20 The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
Radiology
10.21 Radiologists are promptly available, in person or by teleradiology, when requested, for the interpretation of radiographs, performance of complex imaging studies, or interventional procedures.
10.22 Diagnostic information is communicated in a written form and in a timely manner.
10.23 Critical information is verbally communicated to the trauma team.
10.24 Final reports accurately reflect communications, including changes between preliminary and final interpretations.
10.25 Changes in interpretation are monitored by the PIPS program.
10.26 There is at least 1 radiologist appointed as liaison to the trauma program.
10.27 Radiology participates in the trauma PIPS program by at least being involved in the protocol development and trend analysis that relate to diagnostic imaging.
10.28 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department.
10.29 Conventional radiography and CT are available 24 hours per day.
10.30 There is an in-house radiographer.
10.31 There is an in-house CT technologist.
10.32 Conventional catheter angiography and sonography are available 24 hours per day.
10.33 MRI capability is available 24 hours per day.
10.34 The PIPS program documents the appropriate timeliness of the arrival of the MRI technologist.
Critical Care
10.35 There is a surgically directed ICU physician team.
10.36 The surgical director or codirector of the ICU has appropriate training and experience for the role.
10.37 The trauma surgeon remains in charge of patients in the ICU.
10.38 Physician coverage of critically ill trauma patients is available 24 hours per day.
10.39 Physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise.
10.40 The surgical director of the ICU has obtained critical care training during residency or fellowship and has expertise in perioperative and postinjury care of injured patients.
10.41 The surgical director of the ICU has added qualifications in surgical critical care from the American Board of Surgery and meets the Alternate Pathway for critical care.
10.42 The trauma service retains responsibility for patients and coordinates all therapeutic decisions appropriate for its level.
10.43 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
10.44 The patient in Level I facilities have in-house physician coverage for ICU at all times.
10.45 A qualified nurse is available 24 hours a day to provide care during the ICU phase.

10.46 The patient/nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
10.47 The ICU has the necessary equipment to monitor and resuscitate patients.
10.48 Intracranial pressure monitoring equipment is available.
Other Surgical Specialists
10.49 The Level I facility has available a full spectrum of specialists.
Medical Consultants
10.50 The trauma center includes the following medical specialists: cardiology, infectious disease, pulmonary medicine, and nephrology and their respective support teams (for example, respiratory therapy, dialysis team, and nutrition support).
10.51 A respiratory therapist is available to care for trauma patients 24 hours per day.
10.52 Acute hemodialysis is available.
10.53 Laboratory services are available 24 hours per day for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
10.54 The blood bank is capable of blood typing and cross-matching.
10.55 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.
10.56 The capability for coagulation studies, blood gases, and microbiology are present.
11. Rehabilitation
11.1 The hospital has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.
11.2 The hospital has physical therapy services.
11.3 The hospital has social services.
11.4 The hospital has occupational therapy services.
11.5 The hospital has speech therapy services.
11.6 Rehabilitation consulting services, occupational therapy, speech therapy, physical therapy, and social services are available during the acute phase of care.
12. Trauma Registry
12.1 Trauma registry data are collected and analyzed.
12.2 The data are submitted to the National Trauma Data Bank.
12.3 The trauma center uses the registry to support its PIPS program.
12.4 The trauma registry has at least 80% of the trauma cases entered within 180 days of treatment.
12.5 The trauma program ensures that trauma registry confidentiality measures are in place.
12.6 There are strategies for monitoring data validity for the trauma registry.
13. Performance Improvement and Patient Safety (PIPS)
13.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.
13.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
13.3 The program is able to demonstrate that the trauma registry supports the PIPS process.
13.4 The process of analysis includes multidisciplinary review.
13.5 The process of analysis occurs at regular intervals to meet the needs of the program.
13.6 The results of analysis define corrective strategies.

13.7 The results of analysis and corrective strategies are documented.
13.8 The trauma program is empowered to address issues that involve multiple disciplines.
13.9 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
13.10 The trauma program has a medical director with the authority and administrative support to lead the program.
13.11 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
13.12 The trauma director has the authority to recommend changes for the trauma panel based on performance review.
13.13 Identified problem trends undergo multidisciplinary peer review by the Trauma Peer Review Committee.
13.14 The trauma center is able to separately identify the trauma patient population for review.
13.15 There is a process to address trauma program operational issues.
13.16 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
13.17 The process identifies problems.
13.18 The process demonstrates problem resolution (loop closure).
13.19 There is a trauma multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
13.20 The attendance by the trauma medical director and the specialty representatives is greater than 50%.
13.21 The core general surgeon attendance at the trauma peer review committee is greater than 50%.
13.22 In circumstances when attendance is not mandated (noncore members), the trauma medical director ensures dissemination of information from the trauma peer review committee.
13.23 The trauma medical director documents the dissemination of information from the trauma peer review committee.
13.24 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
13.25 Deaths are systematically categorized as preventable, nonpreventable, or potentially preventable.
13.26 When a consistent problem or inappropriate variation is identified, corrective actions are taken and documented.
14. Outreach and Education
14.1 The trauma center is engaged in public and professional education.
14.2 The trauma center does provide some means of referral and access to trauma center resources.
14.3 The trauma center is involved in prevention activities, including public education activities.
14.4 The Level I trauma center provides an ATLS course at least annually.

14.5 The Level I trauma center provides a continuous rotation in trauma surgery for senior residents that is part of an Accreditation Council for Graduate Medical Education- accredited program in any of the following disciplines: general surgery, orthopedic surgery, or neurosurgery; and supports an acute care surgery fellowship consistent with the educational requirements of the American Association for the Surgery of Trauma.
14.6 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.
14.7 All general surgeons and emergency medical physicians on the trauma team have successfully completed the ATLS course at least once.
14.8 The trauma director and the liaison representatives from neurosurgery, orthopedic surgery, and emergency medicine have accrued an average of 16 hours annually or 48 hours in 3 years of external trauma-related CME.
14.9 Other general surgeons, neurosurgeons, orthopedic surgeons, and emergency medicine specialists who take trauma call have acquired 16 hours of CME per year on average or participated in an internal educational process.
15. Prevention
15.1 The trauma center participates in injury prevention.
15.2 The trauma center has a prevention coordinator with a demonstrated job description and salary support.
15.3 The trauma center demonstrates the presence of prevention activities that center on priorities based on local data.
15.4 The trauma center demonstrates collaboration with or participation in national, regional, or state programs.
15.5 The trauma center has the capability to provide intervention or referral for patients identified as problem drinkers.
15.6 The trauma center has the capability to provide intervention or referral for patients identified as problem drinkers.
16. Trauma Research and Scholarship
16.1 The Level I trauma center meets the minimum 20 peer-reviewed articles published in journals included in *Index Medicus* in 3 years or the criterion of 4 of 7 scholarly activities listed in chapter 19 and 10 peer-reviewed articles published in journals included in *Index Medicus* in 3 years.
16.2 The research resulted from work related to the trauma center.
16.3 The articles include authorship or co-authorship by a member of the general surgical team.
16.4 Of the 20 articles, there is at least 1 that includes authorship or co-authorship by members of the general surgery team and at least 1 each from 3 of 6 disciplines: neurosurgery, emergency medicine, orthopedics, radiology, anesthesia, and rehabilitation.
16.5 The trauma center meets the alternative criteria for research: 10 peer-reviewed articles published in journals included in *Index Medicus* resulting from work in the trauma center with at least 1 each from 3 of 6 disciplines (neurosurgery, emergency medicine, orthopedics, radiology, anesthesia, and rehabilitation); AND 4 of 7 scholarly activities as stated in Chapter 19, Trauma Research and Scholarship.
16.6 The administration of the trauma center demonstrates support of the research program.

17. Disaster Planning and Management
17.1 The hospital meets the disaster-related requirements of the Joint Commission.
17.2 A trauma panel surgeon is a member of the hospital's disaster committee.
17.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.
17.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.
18. Organ Procurement Activities
18.1 The trauma center has an established relationship with a recognized OPO.
18.2 There are written policies for triggering notification of the OPO.
18.3 The PIPS process reviews the organ donation rate.
18.4 There are written protocols for declaration of brain death.

Designation Criteria for Level II Trauma Center

Criteria for designation of Level II trauma centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.* Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level II trauma center in Idaho.

Criteria Element
1. Trauma Systems
1.1 There is sufficient involvement by the hospital trauma program staff in state/regional trauma system planning, development, and/or operation.
2. Description of Trauma Centers and Their Roles in a Trauma System
2.1 There is surgical commitment to the trauma center.
2.2 All trauma facilities are on the same campus.
2.4 The trauma director has a responsibility and authority for determining each general surgeon's ability to participate on the trauma panel through the trauma PIPS program and hospital policy.
2.6 The PIPS program has defined conditions requiring the surgeon's immediate hospital presence.
2.7 The 80% compliance of the surgeon's presence in the ED is confirmed and monitored by PIPS (30 minutes)
2.8 The trauma surgeon on call is dedicated to the trauma center wall on duty.
2.9 A published backup call schedule for trauma surgery is available.
2.10 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.11 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.12 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
3. Prehospital Trauma Care
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma surgeon is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
4. Interhospital Transfer
4.1 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.
4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient, for example, payment is not considered.
5. Hospital Organization and the Trauma Program
5.1 The hospital has the commitment of the institutional governing body and the medical staff to become a trauma center.

5.2 There is a current resolution supporting the trauma center from the hospital board.
5.3 There is a current resolution supporting the trauma center from the medical staff.
5.4 The multidisciplinary trauma program continuously evaluates its process and outcomes to ensure optimal and timely care.
5.5 The trauma medical director is a board-certified surgeon or an ACS Fellow.
5.6 The trauma medical director participates in trauma call.
5.7 The trauma director is current in ATLS.
5.8 The trauma director is both a member and an active participant in any national or regional trauma organizations.
5.9 The trauma director has the authority to correct deficiencies in trauma care or to exclude from trauma call the trauma team members who do not meet specified criteria.
5.10 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
5.11 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
5.12 Seriously injured patients are admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers.
5.13 There is sufficient infrastructure and support to the trauma service to ensure adequate provision of care.
5.14 In teaching facilities, the requirements of the Residency Review Committee are met.
5.15 The trauma program manager shows evidence of educational preparation (a minimum of 16 hours of trauma-related continuing education per year) and clinical experience of injured patients.
5.16 There is a multidisciplinary peer review committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
5.17 Adequate (>50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
5.18 The core group is adequately defined by the trauma medical director.
5.19 The core group takes at least 60% of the total trauma call hours each month.
5.20 The trauma director ensures and documents dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.
5.21 There is a Trauma Program Operational Process Performance Improvement Committee.
6. Clinical Functions: General Surgery
6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements
6.2 The general surgeon is board-certified and meets the Alternative Pathway and is an ACS Fellow.
6.3 The trauma surgeon has privileges in general surgery.
6.4 The trauma surgeon on call is dedicated to the trauma center while on duty.
6.5 A published backup call schedule for trauma surgery is available.
6.6 An attendance threshold of 80% is met for trauma surgeon presence in the ED.
6.7 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.

6.8 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.
6.9 There is a multidisciplinary peer review committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.10 Adequate (at least 50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
6.11 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
6.12 The trauma medical director has documented 16 hours annually or 48 hours in three years of verifiable, external trauma related CME.
6.13 Other trauma surgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME or an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
6.14 The trauma medical director is a member and participates in regional or national trauma organizations.
7. Clinical Functions: Emergency Medicine
7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
7.2 Emergency physicians cover in-house emergencies with a PIPS process demonstrating the efficacy of this practice.
7.3 In institutions in which there are emergency medicine residency training programs, supervision is provided by an in-house attending emergency physician 24 hours per day.
7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the director of trauma services.
7.5 An emergency physician is board-certified and meets the Alternate Pathway.
7.6 Emergency physicians on the call panel are regularly involved in the care of injured patients.
7.7 A representative from the ED participates in the prehospital PIPS program.
7.8 A designated emergency physician is available to the trauma director for PIPS issues that occur in the ED.
7.9 There is emergency physician participation with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee (dealing with systems issues).
7.10 The emergency medicine representative or designee to the multidisciplinary peer review committee attends a minimum of 50% of these meetings.
7.11 The emergency physician liaison representative has the documented 16 annually or 48 hours in 3 years of verifiable, external trauma-related CME.
7.12 Other emergency physicians who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
7.13 There are emergency physicians who have successfully completed the ATLS course.
7.14 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.
8. Clinical Functions: Neurosurgery

8.1 A neurosurgical liaison is designated.
8.2 Neurotrauma care is promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.
8.3 The hospital provides an on-call neurosurgical backup schedule with formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed.
8.4 There is a PIPS review of all neurotrauma patients who are diverted or transferred.
8.5 An attending neurosurgeon is promptly available to the hospital's trauma service when the neurosurgical consultation is requested.
8.6 The neurosurgeons who care for trauma patients are board-certified and meet the Alternate Pathway.
8.7 Qualified neurosurgeons are regularly involved in the care of head- and spinal cord- injured patients and are credentialed by the hospital with general neurosurgical privileges.
8.8 The neurosurgery service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
8.9 The neurosurgeon representative attends a minimum of 50% of the multidisciplinary peer review committee meetings.
8.10 The neurosurgeon liaison representative has the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
8.11 Other neurosurgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program,
9. Clinical Functions: Orthopedic Surgery
9.1 Physical and occupational therapists and rehabilitation specialists are present.
9.2 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.3 A mechanism to ensure operating room availability without undue delay for patients with semi urgent orthopedic injuries.
9.4 There is an orthopedic surgeon who is identified as the liaison to the trauma program.
9.5 Orthopedic team members have dedicated call at their institution and a backup call system.
9.6 An orthopedic team member is promptly available in the trauma resuscitation area when consulted by the surgical trauma team leader for multiple injured patients.
9.7 The design of the backup call system, the responsibility of the orthopedic trauma liaison, has been approved by the trauma program director.
9.8 Provide sufficient resources, including instruments, equipment, and personnel, for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures.
9.9 The PIPS process reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.
9.10 The orthopedic service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.

9.11 The orthopedic trauma liaison or representative attends a minimum of 50% of the multidisciplinary peer review meetings.
9.12 Orthopedic surgeons who care for injured patients are board-certified and meet the Alternate Pathway.
9.13 The orthopedic surgeon has privileges in general orthopedic surgery.
9.14 The orthopedic surgical liaison to the trauma program has documented at least 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
9.15 The orthopedic trauma team member has documentation of the acquisition of 16 hours of CME per year on average and has participated in an internal educational process conducted by the trauma program and the orthopedic liaison based on the principles of practice-based learning and the PIPS program.
10. Collaborative Clinical Services
Anesthesia
10.1 Anesthesia services are promptly available for emergency operations.
10.2 Anesthesia services are promptly available for airway problems.
10.3 There is an anesthesiologist liaison designated to the trauma program.
10.4 When CRNAs are used to fulfill availability requirement, the staff anesthesiologist on call, if available, is (1) advised, (2) promptly available for consult at all times, and (3) present for all operations if requested by the CRNA.
10.5 The availability of the anesthesia services and the absence of delays in airway control or operations are documented in the hospital PIPS process.
10.6 Anesthesia services are available 24 hours a day and present for all operations.
10.7 In trauma centers without in-house anesthesia services, protocols are in place to ensure the timely arrival at the bedside of the anesthesia provider.
10.8 In a center without anesthesia services, there is documentation of the presence of physicians skilled in emergency airway management.
10.9 All anesthesiologists taking call have successfully completed a residency program.
10.10 The anesthesia liaison is identified.
10.11 The anesthesia representative participates in the trauma PIPS program.
10.12 The anesthesia representative or designee to the trauma program attends at least 50% of the multidisciplinary peer review meetings.
Operating Room
10.13 There is a mechanism for providing additional staff for a second operating room when the first operating room is occupied.
10.14 The operating room is adequately staffed and readily available.
10.15 The PIPS program evaluates the operating room availability and delays when an on-call team is used.
10.16 The operating room has the essential equipment.
10.17 Trauma centers have the necessary equipment for a craniotomy.
Post anesthesia Care Unit (PACU)
10.18 The PACU has qualified nurses available 24 hours per day as needed during the patient's post anesthesia recovery phase.

10.19 The PACU is covered by a call team from home with documentation by the PIPS program that nurses are available and delays are not occurring.
10.20 The PACU has the necessary equipment to monitor and resuscitate patients.
10.21 The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
Radiology
10.22 Radiologists are promptly available, in person or by teleradiology, when requested, for the interpretation of radiographs, performance of complex imaging studies, or interventional procedures.
10.23 Diagnostic information is communicated in a written form and in a timely manner.
10.24 Critical information is verbally communicated to the trauma team.
10.25 Final reports accurately reflect communications, including changes between preliminary and final interpretations.
10.26 Changes in interpretation are monitored by the PIPS program.
10.27 There is at least 1 radiologist appointed as liaison to the trauma program.
10.28 Radiology participates in the trauma PIPS program by at least being involved in the protocol development and trend analysis that relate to diagnostic imaging.
10.29 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department.
10.30 Conventional radiography and CT are available 24 hours per day.
10.31 There is an in-house radiographer.
10.32 When the CT technologist responds from outside the hospital, the PIPS program documents response time.
10.33 Conventional catheter angiography and sonography are available 24 hours per day.
Critical Care
10.34 The trauma center has a surgical director or codirector for the ICU who is responsible for setting policies and administration related to trauma ICU patients.
10.35 The trauma surgeon remains in charge of patients in the ICU.
10.36 Physician coverage of critically ill trauma patients is available 24 hours per day.
10.37 Physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise.
10.38 The trauma service retains responsibility for patients and coordinates all therapeutic decisions appropriate for its level.
10.39 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
10.40 Coverage of emergencies in the ICU leaves that ED with appropriate physician coverage.
10.41 A qualified nurse is available 24 hours a day to provide care during the ICU phase.
10.42 The patient:nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
10.43 The ICU has the necessary equipment to monitor and resuscitate patients.
10.44 Intracranial pressure monitoring equipment is available.
Other Surgical Specialists
10.45 The Level II Center has required surgical specialists.

Medical Consultants
10.46 Specialists from internal medicine and pulmonary medicine are available on staff.
10.47 Specialty consultations for problems related to internal medicine, pulmonary medicine, cardiology, gastroenterology, and infectious disease are available.
10.48 A respiratory therapist is available to care for trauma patients 24 hours per day.
10.49 A Level II center has either dialysis capabilities or a transfer agreement.
10.50 Nutrition support services are available.
10.51 Laboratory services are available 24 hours per day for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
10.52 The blood bank is capable of blood typing and cross-matching.
10.53 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.
10.54 The capability for coagulation studies, blood gases, and microbiology are present.
11. Rehabilitation
11.1 The hospital has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.
11.2 The hospital has physical therapy services.
11.3 The hospital has social services.
11.4 The hospital has occupational therapy services.
11.5 The hospital has speech therapy services.
11.6 Rehabilitation consulting services, occupational therapy, speech therapy, physical therapy, and social services are available during the acute phase of care.
12. Rural Trauma Care
12.1 A rural Level II center provides the same level of care as a nonrural Level II.
12.2 The PIPS process demonstrates the appropriate care or response by providers.
13. Trauma Registry
13.1 Trauma registry data are collected and analyzed.
13.2 The data are submitted to the National Trauma Data Bank.
13.3 The trauma center uses the registry to support its PIPS program.
13.4 The trauma registry has at least 80% of the trauma cases entered within 180 days of treatment.
13.5 The trauma program ensures that trauma registry confidentiality measures are in place.
13.6 There are strategies for monitoring data validity for the trauma registry.
14. Performance Improvement and Patient Safety (PIPS)
14.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.
14.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
14.3 The program is able to demonstrate that the trauma registry supports the PIPS process.
14.4 The process of analysis includes multidisciplinary review.
14.5 The process of analysis occurs at regular intervals to meet the needs of the program.
14.6 The results of analysis define corrective strategies.
14.7 The results of analysis and corrective strategies are documented.

14.8 The trauma program is empowered to address issues that involve multiple disciplines.
14.9 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
14.10 The trauma program has a medical director with the authority and administrative support to lead the program.
14.11 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
14.12 The trauma director has the authority to recommend changes for the trauma panel based on performance review.
14.13 Identified problem trends undergo multidisciplinary peer review by the Trauma Peer Review Committee.
14.14 The trauma center is able to separately identify the trauma patient population for review.
14.15 There is a process to address trauma program operational issues.
14.16 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
14.17 The process identifies problems.
14.18 The process demonstrates problem resolution (loop closure).
14.19 There is a trauma multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
14.20 The attendance by the trauma medical director and the specialty representatives is greater than 50%.
14.21 The core general surgeon attendance at the trauma peer review committee is greater than 50%.
14.22 In circumstances when attendance is not mandated (noncore members), the trauma medical director ensures dissemination of information from the trauma peer review committee.
14.23 The trauma medical director documents the dissemination of information from the trauma peer review committee.
14.24 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
14.25 Deaths are systematically categorized as preventable, nonpreventable, or potentially preventable.
14.26 When a consistent problem or inappropriate variation is identified, corrective actions are taken and documented.
15. Outreach and Education
15.1 The trauma center is engaged in public and professional education.
15.2 The trauma center does provide some means of referral and access to trauma center resources.
15.3 The trauma center is involved in prevention activities, including public education activities.
15.4 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.
15.5 All general surgeons and emergency medical physicians on the trauma team have successfully completed the ATLS course at least once.

15.6 The trauma director and the liaison representatives from neurosurgery, orthopedic surgery, and emergency medicine have accrued an average of 16 hours annually or 48 hours in 3 years of external trauma-related CME.
15.7 Other general surgeons, neurosurgeons, orthopedic surgeons, and emergency medicine specialists who take trauma call have acquired 16 hours of CME per year on average or participated in an internal educational process.
16. Prevention
16.1 The trauma center participates in injury prevention.
16.2 The trauma center has a prevention coordinator with a demonstrated job description and salary support.
16.3 The trauma center demonstrates the presence of prevention activities that center on priorities based on local data.
16.4 The trauma center demonstrates collaboration with or participation in national, regional, or state programs.
16.5 The trauma center has the capability to provide intervention or referral for patients identified as problem drinkers.
17. Disaster Planning and Management
17.1 The hospital meets the disaster-related requirements of the Joint Commission.
17.2 A trauma panel surgeon is a member of the hospital's disaster committee.
17.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.
17.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.
18. Organ Procurement Activities
18.1 The trauma center has an established relationship with a recognized OPO.
18.2 There are written policies for triggering notification of the OPO.
18.3 The PIPS process reviews the organ donation rate.
18.4 There are written protocols for declaration of brain death.

Designation Criteria for Level III Trauma Center

Criteria for designation of Level III trauma centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.* Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level III trauma center in Idaho.

Criteria Element
1. Trauma Systems
1.1 There is sufficient involvement by the hospital trauma program staff in state/regional trauma system planning, development, and/or operation.
2. Description of Trauma Centers and Their Roles in a Trauma System
2.1 There is surgical commitment to the trauma center.
2.2 All trauma facilities are on the same campus.
2.3 The trauma director has a responsibility and authority for determining each general surgeon's ability to participate on the trauma panel through the trauma PIPS program and hospital policy.
2.4 The 80% compliance of the surgeon's presence in the ED is confirmed and monitored by PIPS (30 minutes)
2.5 Has continuous general surgical coverage.
2.6 The trauma panel surgeons respond promptly to activations, remain knowledgeable in trauma care principles whether treating locally or transferring to a center with more resources, and participate in performance review activities.
2.7 Has well defined transfer plans.
2.8 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.9 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.10 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
3. Prehospital Trauma Care
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma surgeon is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
4. Interhospital Transfer
4.1 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.
4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient, for example, payment is not considered.
5. Hospital Organization and the Trauma Program

5.1 The hospital has the commitment of the institutional governing body and the medical staff to become a trauma center.
5.2 There is a current resolution supporting the trauma center from the hospital board.
5.3 There is a current resolution supporting the trauma center from the medical staff.
5.4 The multidisciplinary trauma program continuously evaluates its process and outcomes to ensure optimal and timely care.
5.5 The trauma medical director is a board-certified surgeon or an ACS Fellow.
5.6 The trauma medical director participates in trauma call.
5.7 The trauma director is current in ATLS.
5.8 The trauma director has the authority to correct deficiencies in trauma care or to exclude from trauma call the trauma team members who do not meet specified criteria.
5.9 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
5.10 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
5.11 The structure of the trauma program allows the trauma director to have oversight and authority for care of the injured patients who may be admitted to individual surgeons.
5.12 There is a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners.
5.13 There is a multidisciplinary peer review committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
5.14 Adequate (>50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
5.15 The core group is adequately defined by the trauma medical director.
5.16 The core group takes at least 60% of the total trauma call hours each month.
5.17 The trauma director ensures and documents dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.
5.18 There is a Trauma Program Operational Process Performance Improvement Committee.
6. Clinical Functions: General Surgery
6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements
6.2 The trauma surgeon has privileges in general surgery.
6.3 An attendance threshold of 80% is met for trauma surgeon presence in the ED.
6.4 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.
6.5 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.
6.6 There is a multidisciplinary peer review committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.7 Adequate (at least 50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
6.8 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
7. Clinical Functions: Emergency Medicine

7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
7.2 Emergency physicians cover in-house emergencies with a PIPS process demonstrating the efficacy of this practice.
7.3 In institutions in which there are emergency medicine residency training programs, supervision is provided by an in-house attending emergency physician 24 hours per day.
7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the director of trauma services.
7.5 Emergency physicians on the call panel are regularly involved in the care of injured patients.
7.6 A representative from the ED participates in the prehospital PIPS program.
7.7 A designated emergency physician is available to the trauma director for PIPS issues that occur in the ED.
7.8 There is emergency physician participation with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee (dealing with systems issues).
7.9 The emergency medicine representative or designee to the multidisciplinary peer review committee attends a minimum of 50% of these meetings.
7.10 There are emergency physicians who have successfully completed the ATLS course.
7.11 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.
8. Clinical Functions: Neurosurgery
8.1 There is a trauma director-approved plan that determines which types and severity of neurologic injury patients should remain at the facility when no neurosurgical coverage is present.
8.2 There is a performance improvement program that convincingly demonstrates appropriate care in the facility that treats neurotrauma patients.
8.3 There are transfer agreements with appropriate Level I and II centers.
9. Clinical Functions: Orthopedic Surgery
9.1 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.2 There is an orthopedic surgeon who is identified as the liaison to the trauma program.
9.3 The PIPS process reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.
9.4 The orthopedic surgeon is on call and promptly available 24 hours a day.
9.5 The orthopedic service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
9.6 The orthopedic trauma liaison or representative attends a minimum of 50% of the multidisciplinary peer review meetings.
9.7 The orthopedic surgeon has privileges in general orthopedic surgery.
10. Collaborative Clinical Services
Anesthesia
10.1 Anesthesia services are promptly available for emergency operations.
10.2 Anesthesia services are promptly available for airway problems.
10.3 There is an anesthesiologist liaison designated to the trauma program.

10.4 The availability of the anesthesia services and the absence of delays in airway control or operations are documented in the hospital PIPS process.
10.5 Anesthesia services are available 24 hours a day and present for all operations.
10.6 In trauma centers without in-house anesthesia services, protocols are in place to ensure the timely arrival at the bedside of the anesthesia provider.
10.7 In a center without anesthesia services, there is documentation of the presence of physicians skilled in emergency airway management.
10.8 Availability of anesthesia services and the absence of delays in airway control or operations are documented by the hospital PIPS process.
10.9 The anesthesia liaison is identified.
10.10 The anesthesia representative participates in the trauma PIPS program.
10.11 The anesthesia representative or designee to the trauma program attends at least 50% of the multidisciplinary peer review meetings.
Operating Room
10.12 The operating room is adequately staffed and readily available.
10.13 The PIPS program evaluates the operating room availability and delays when an on-call team is used.
10.14 The operating room has the essential equipment.
Post anesthesia Care Unit (PACU)
10.15 The PACU has qualified nurses available 24 hours per day as needed during the patient's post anesthesia recovery phase.
10.16 The PACU is covered by a call team from home with documentation by the PIPS program that nurses are available and delays are not occurring.
10.17 The PACU has the necessary equipment to monitor and resuscitate patients.
10.18 The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
Radiology
10.19 Radiologists are promptly available, in person or by teleradiology, when requested, for the interpretation of radiographs, performance of complex imaging studies, or interventional procedures.
10.20 Diagnostic information is communicated in a written form and in a timely manner.
10.21 Critical information is verbally communicated to the trauma team.
10.22 Final reports accurately reflect communications, including changes between preliminary and final interpretations.
10.23 Changes in interpretation are monitored by the PIPS program.
10.24 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department.
10.25 Conventional radiography and CT are available 24 hours per day.
10.26 When the CT technologist responds from outside the hospital, the PIPS program documents response time.
Critical Care

10.27 The trauma center has a surgical director or codirector for the ICU who is responsible for setting policies and administration related to trauma ICU patients.
10.28 The trauma surgeon remains in charge of patients in the ICU.
10.29 When the patient is critically ill, there is a mechanism in place to provide prompt availability of ICU physician coverage 24 hours per day.
10.30 The surgical director or surgical codirector is a surgeon, is credentialed by the hospital to care for ICU patients, and participates in the PIPS program.
10.31 The trauma service retains responsibility for patients and coordinates all therapeutic decisions appropriate for its level.
10.32 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
10.33 Coverage of emergencies in the ICU leaves that ED with appropriate physician coverage.
10.34 The PIPS program reviews admissions and transfers to ensure appropriateness.
10.35 A qualified nurse is available 24 hours a day to provide care during the ICU phase.
10.36 The patient:nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
10.37 The ICU has the necessary equipment to monitor and resuscitate patients.
10.38 There is intracranial pressure monitoring equipment in a center that admits neurotrauma patients.
Other Surgical Specialists
10.39 Has orthopedic surgery available.
Medical Consultants
10.40 Internal medicine specialists are available.
10.41 There is a respiratory therapist available and on call 24 hours per day.
10.42 Laboratory services are available 24 hours per day for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
10.43 The blood bank is capable of blood typing and cross-matching.
10.44 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.
10.45 The capability for coagulation studies, blood gases, and microbiology are present.
11. Rehabilitation
11.1 The hospital has physical therapy services.
11.2 The hospital has social services.
12. Trauma Registry
12.1 Trauma registry data are collected and analyzed.
12.2 The data are submitted to the National Trauma Data Bank.
12.3 The trauma center uses the registry to support the PIPS program.
12.4 The trauma registry has at least 80% of the trauma cases entered within 180 days of treatment.
12.5 The trauma program ensures that trauma registry confidentiality measures are in place.
12.6 There are strategies for monitoring data validity for the trauma registry.
13. Performance Improvement and Patient Safety (PIPS)
13.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.

13.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
13.3 The program is able to demonstrate that the trauma registry supports the PIPS process.
13.4 The process of analysis includes multidisciplinary review.
13.5 The process of analysis occurs at regular intervals to meet the needs of the program.
13.6 The results of analysis define corrective strategies.
13.7 The results of analysis and corrective strategies are documented.
13.8 The trauma program is empowered to address issues that involve multiple disciplines.
13.9 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
13.10 The trauma program has a medical director with the authority and administrative support to lead the program.
13.11 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
13.12 The trauma director has the authority to recommend changes for the trauma panel based on performance review.
13.13 Identified problem trends undergo multidisciplinary peer review by the Trauma Peer Review Committee.
13.14 The trauma center is able to separately identify the trauma patient population for review.
13.15 There is a process to address trauma program operational issues.
13.16 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
13.17 The process identifies problems.
13.18 The process demonstrates problem resolution (loop closure).
13.19 There is a trauma multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
13.20 The attendance by the trauma medical director and the specialty representatives is greater than 50%.
13.21 The core general surgeon attendance at the trauma peer review committee is greater than 50%.
13.22 In circumstances when attendance is not mandated (noncore members), the trauma medical director ensures dissemination of information from the trauma peer review committee.
13.23 The trauma medical director documents the dissemination of information from the trauma peer review committee.
13.24 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
13.25 Deaths are systematically categorized as preventable, nonpreventable, or potentially preventable.
13.26 When a consistent problem or inappropriate variation is identified, corrective actions are taken and documented.
14. Outreach and Education
14.1 The trauma center is engaged in public and professional education.

14.2 The trauma center is involved in prevention activities, including public education activities.
14.3 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.
14.4 All general surgeons and emergency medical physicians on the trauma team have successfully completed the ATLS course at least once.
15. Prevention
15.1 The trauma center participates in injury prevention.
16. Disaster Planning and Management
16.1 The hospital meets the disaster-related requirements of the Joint Commission.
16.2 A trauma panel surgeon is a member of the hospital's disaster committee.
16.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.
16.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.
17. Organ Procurement Activities
17.1 The trauma center has an established relationship with a recognized OPO.
17.2 There are written policies for triggering notification of the OPO.
17.3 The PIPS process reviews the organ donation rate.
17.4 There are written protocols for declaration of brain death.

Designation Criteria for Level IV Trauma Center

Criteria for designation of Level IV trauma centers are based upon Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006. Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level IV trauma center in Idaho.

Type I criteria must be in place at the time of the verification site visit to achieve verification. Type II criteria are also required but are less critical. If three or fewer Type II deficiencies are present at the time of the site visit and no Type I criteria are cited, a 1-year certificate of verification is issued. During the ensuring 12 months, if the trauma center successfully corrects the deficiencies, the period of verification will be extended to 3 years from the date of the initial verification visit.

If any Type I deficiency or more than three Type II deficiencies are present at the time of the initial verification site visit, the hospital will not be verified.

Criteria Element	Type
1. Trauma Systems	
1.1 Meaningful involvement in state and regional trauma system planning, development, and operation is essential for all designated trauma centers and participating acute care facilities within a region.	I
1.2 The individual trauma centers and their health care providers are essential system resources that must be active and engaged participants.	I
1.3 They must function in a way that encourages trauma center-based standardization, integration, and PIPS out to the region while engaging in inclusive trauma system planning and development.	I
2. Description of Trauma Centers and Their Roles in a Trauma System	
2.1 This trauma center must have an integrated, concurrent performance improvement and patient safety (PIPS) program to ensure optimal care and continuous improvement in care.	I
2.2 Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification.	I
2.3 For Level IV trauma centers, it is expected that the physician or midlevel provider will be in the ED on patient arrival for the highest level of activation, provided there is adequate notification from the prehospital providers. The maximum acceptable response time is 30 minutes, from patient arrival in the ED. The PIPS program must demonstrate that the provider's presence is in compliance at least 80% of the time.	I
2.4 Well-defined transfer plans are essential.	I
2.5 A level IV facility must have 24-hour emergency coverage by a physician or midlevel provider.	I
2.6 The ED at Level IV centers must be continuously available for resuscitation with coverage by a registered nurse and physician or midlevel provider,.	I

2.7 These providers must have successfully completed ATLS certification as part of their competencies in trauma.	II
2.8 A trauma medical director and trauma program manager knowledgeable and involved in trauma care must work together with guidance from the trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking.	II
2.9 The multidisciplinary trauma peer review committee must meet regularly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to the care of the injured.	I
2.10 A PIPS program must have audit filters to review and improve pediatric and adult patient care.	II
2.11 Collaborative treatment and transfer guidelines reflecting the Level IV facilities' capabilities must be developed and regularly reviewed, with input from higher-level trauma centers in the region.	II
2.12 Because of the greater need for collaboration with receiving trauma centers, the Level IV trauma center must also actively participate in regional and statewide trauma system meetings and committees that provide oversight.	I
2.13 The Level IV trauma center must also be the local trauma authority and assume the responsibility for providing training for prehospital and hospital-based providers.	II
2.14 The facility must participate in regional disaster management plans and exercises.	II
3. Prehospital Trauma Care	
3.1 The protocols that guide prehospital trauma care must be established by the trauma health care team, including surgeons, emergency physicians, medical directors for EMS agencies, and basic and advanced prehospital personnel.	II
3.2 When a trauma center is required to go on bypass or divert, the center must have a system to notify dispatch and EMS agencies. The center must do the following:	
a. Prearrange alternative destinations with transfer agreements in place	II
b. Notify other centers of divert or advisory status	
c. Maintain a divert log	
d. Subject all diverts and advisories to performance improvement procedures	
4. Interhospital Transfer	
4.1 A very important aspect of interhospital transfer is an effective PIPS program that includes evaluating transport activities. Perform a PIPS review of all transfers.	I
	II
5. Hospital Organization and the Trauma Program	
5.1 Documentation of administrative commitment is required from the governing body and the medical staff.	I
5.2 The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the six required criteria listed in Table 1.	II

5.3 Other potential criteria for trauma team activation that have been determined by the trauma program to be included in various levels of trauma activation must be evaluated on an ongoing basis in the PIPS process to determine their positive predictive value in identifying patients who require the resources of the full trauma team.	II
5.4 In Level IV trauma centers the team must be fully assembled within 30 minutes of notification or patient arrival, whichever is shorter.	II
5.5 At a minimum, the six criteria listed in Table 1 to be included in the highest level of activation in all trauma centers.	II
5.6 Again, the six criteria listed in Table 1 must remain in the highest level of activation.	II

Table 1. Minimum Criteria for Full Trauma Team Activation
• Confirmed blood pressure less than 90 mm Hg at any time in adults and age-specific hypotension in children;
• Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee;
• Glasgow Coma Scale score less than 9 with mechanism attributed to trauma;
• Transfer patients from other hospitals receiving blood to maintain vital signs;
• Intubated patients transferred from the scene, **OR**
• Patients who have respiratory compromise or are in need of emergent airway
• Included intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients intubated at another facility who are now stable from a respiratory standpoint)
• Emergency physician's discretion

6. Clinical Functions: General Surgery	
6.1 For Level IV trauma centers with surgical capabilities, the maximum acceptable response time is 30 minutes. Response time will be tracked from patient arrival rather than from notification or activation. An 80% attendance threshold must be met for the highest-level activations.	I
7. Collaborative Clinical Services	
7.1 Conventional radiology services (non-CT) must be available in all trauma centers 24 hours per day.	I
7.2 The PIPS program must document that timely and appropriate ICU care and coverage are being provided when available.	II
7.Laboratory services must be available 24 hours per day for the standard analyses of blood, urine, and other body fluids, including microsampling when appropriate.	I
7.4 The blood bank must be capable of blood typing and cross-matching.	I
7.5 Must have a transfusion protocol developed collaboratively between the trauma service and the blood bank.	I
7.6 Non-physician providers who participate in the initial evaluation of trauma patients must demonstrate current verification as an ATLS provider.	II

7.7 The trauma program must also demonstrate appropriate orientation, credentialing process, and skill maintenance for advanced practitioners as witnessed by an annual review by the trauma medical director.	II
8. Rural Trauma Care	
8.2 Transfer guidelines and agreements between facilities are crucial and must be developed after evaluating the capabilities of rural hospitals and medicine transport agencies.	II
8.3 All transfers must be evaluated as part of the receiving trauma center's PIPS process and feedback should be provided to the transferring center	II
8.5 Issues that must be reviewed will revolve predominately around (1) system and process issues such as documentation and communication; (2) clinical care, including identification and treatment of immediate life-threatening injuries; and (3) transfer decisions.	I
8.6 The best possible care for patients must be achieved with a cooperative and inclusive program that clearly defines the role of each facility within the system.	II
9. Guidelines for the Operation of Burn Centers	
9.1 Trauma centers that refer burn patients to a designated burn center must have in place written transfer agreements with the referral burn center.	II
10. Trauma Registry	
10.1 Trauma registry data must be collected and analyzed by every trauma center. Data must be collected by State of Idaho TSE trauma registry.	II
10.2 All trauma centers must use a risk stratified benchmarking system to measure performance and outcomes.	II
11. Performance Improvement and Patient Safety (PIPS)	
11.1 Criteria for all levels of trauma team activation (TTA) must be defined and reviewed annually. See table 1 for minimal acceptable criteria.	II
11.2 All Trauma Team Activations must be categorized by the level of response and quantified by number and percentage, as shown in table 1.	II
11.3 In level IV trauma centers with surgical capability Trauma surgeon response time to other levels of TTA, and for back-up call response, should be determined and monitored. Variances should be documented and reviewed for reason for delay, opportunities for improvement, and corrective actions.	II
11.4 In level IV Centers with ICU capability, transfers to a higher level of care within the institution must be routinely monitored, and cases identified must be reviewed to determine the rationale for transfer, adverse outcomes, and opportunities for improvement.	II
11.5 The trauma center must demonstrate that all trauma patients can be identified for review.	II
11.6 The trauma PIPS program must be supported by a registry and a reliable method of concurrent data collection that consistently obtains information necessary to identify opportunities for improvement.	II
11.7 All trauma centers must use a risk stratified benchmarking system to measure performance and outcomes.	II
11.8 To achieve this goal, a trauma program must use clinical practice guidelines, protocols, and algorithms derived from evidence-based validated resources.	II

11.9 All process and outcome measures must be documented within the trauma PIPS program's written plan and reviewed and updated at least annually.	II
11.10 Once an event is identified, the trauma PIPS program must be able to verify and validate that event.	II
12. Outreach and Education	
12.1 All verified trauma centers, however, must engage in public and professional education.	II
12.2 The successful completion of the ATLS course, at least once, is required in all levels of trauma centers for all general surgeons, emergency medicine physicians, and midlevel providers on the trauma team.	II
13. Prevention	
13.1 Each trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.	II
13.2 Trauma centers must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.	II
13.3 Universal screening for alcohol use must be performed for all adolescent and adult injured patients and must be documented. Screening and brief intervention for alcohol use is required for all trauma centers.	II
14. Disaster Planning and Management	
14.1 All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.	II
15. Organ Procurement Activities	
15.1 It is essential that each trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.	II

Type I criteria must be in place at the time of the verification site visit to achieve verification. Type II criteria are also required but are less critical. If one to three Type II deficiencies are present at the time of the site visit and no Type I criteria are cited, a 1-year certificate of verification is issued. During the ensuring 12 months, if the trauma center successfully corrects the deficiencies, the period of verification will be extended to 3 years from the date of the initial verification visit.

If any Type I deficiency or more than three Type II deficiencies are present at the time of the initial verification site visit, the hospital is not verified.

Designation Criteria for Level V Trauma Center

The following elements must be met for designation as a Level V trauma center in Idaho.
E- Essential element for designation.
D- Desired element for designation.

Criteria Element	Type
1. Center Mission	
1.1 Center is a health care facility (as defined in section 10 of the TSE Rules) with the commitment, medical staff, personnel, and training necessary to provide initial care and stabilization to the trauma patient.	E
1.2 Center provides initial resuscitation of the trauma patient and immediate intervention to control hemorrhage and to assure maximal stabilization prior to referral to an appropriate higher level of care.	E
1.3 The decision to transfer rests with the attending provider.	E
1.4 Center works collaboratively with state agencies and other trauma centers to develop transfer protocols and a well-defined transfer sequence.	E
1.5 Center will participate in the Regional TSE Committee.	E
2. Center Organization	
Trauma Program/Director	
2.1 The trauma program is established and recognized by the medical staff and administration.	E
2.2 The director is trained, experienced and committed to the care of the trauma patient.	E
2.3 The director is responsible for developing and directing the quality improvement program.	E
2.4 The director has the overall accountability for all trauma care and exercises administrative authority for the trauma program.	E
2.5 The director is given administrative support for implementation of requirements as outlined in this document.	E
2.6 The director maintains personal involvement in patient care, staff education and professional organizations and the trauma system at the community and state level.	E
2.7 The program director of the trauma team is ATLS certified and current.	E
Trauma Team	
2.8 Center policy and procedures describe the role of all personnel on the trauma team.	E

2.9 The trauma team is directed by a qualified director.	D
2.10 The trauma team consists of:	
a. Mid Level Practitioners	D
b. RN	E
Trauma Team Qualifications	
2.12 Where mid-level RNP or PA-C providers staff the emergency department, there must be documentation of training and knowledge of care for the trauma patient.	E
2.13 Trauma team physicians and mid-level providers are credentialed by the medical staff and governing board.	E
2.14 Trauma team physicians which are not board certified or eligible are reviewed by the medical director of trauma service and credentialed by the medical staff and governing board.	E
2.15 Trauma team members participate in multi-disciplinary trauma committee and the quality improvement process.	E
2.16 There are written guidelines at the local level to determine which types of patients are admitted and which are appropriately transferred.	E
2.17 Trauma physicians must have documentation of training and knowledge of care for the trauma patient	E
Trauma Program Manager	
2.18 The center has designated in writing a trauma program manager. The trauma program manager shows evidence of educational preparation and clinical experience of injured patients.	E
2.19 There is evidence that the trauma program manager works with the trauma director to address the multidisciplinary needs of the trauma program.	E
2.20 The trauma program manager is responsible for the use of trauma registry data for quality improvement and trauma education.	E
2.21 The trauma program manager is liaison with local EMS and accepting centers.	E
3. Clinical Components	
3.1 There is a health care provider(s) (MD, DO, FNP, PA) during hours of operation. It is expected that the health care provider will be in the center within 30 minutes of patient arrival.	E
3.2 There is a call list of specialists (when available) who are promptly available from inside or outside of the center. The list is posted in the center.	E
3.3 Policy and procedures exist to notify the patient's primary care physician of the patient's condition at an appropriate time.	E
4. Center Standards	
4.1 The center is staffed to assure immediate and appropriate care to trauma patients during hours of operation.	E
4.2 The provider is available during hours of operation and is immediately available and capable of performing initial resuscitation and other procedures not requiring general anesthesia.	E

4.3 The center has established standards to ensure immediate and appropriate care of the adult and pediatric trauma patient.	E
4.4 The program director participates in the Trauma Committee and the trauma QI process attending at least 50% of meetings.	E
4.5 There is RN staffing in the center during hours of operation at levels necessary to meet the needs of the trauma patient.	E
4.6 There is evidence of nursing participation in the trauma QI program.	E
5. Clinical Support Services	
5.5 There is written policy to delineate the availability of CT services to the trauma patient.	E
Transfer Protocols	
5.10 There are transfer protocols in place with Level I, Level II, and Level III centers as well as specialty referral centers, i.e. burn, pediatrics, and rehabilitation.	E
5.11 There is a feedback loop with Level I, Level II, and Level III centers to facilitate a good understanding of patient outcome.	E
5.12 There is evidence that all centers collaborate to develop guidelines indicating which patients are considered for transfer and procedures to ensure expedient and safe transfer of the trauma patient.	E
5.13 There is a provision for feedback to the referring center.	E
5.14 Trauma services are provided regardless of ability to pay.	E
5.15 Pediatric patients needing tertiary pediatric care are transferred according to written guidelines.	E
Performance Improvement (PI)	
5.16 The center participates in the trauma registry	E
5.17 The center participates in the statewide evaluation process, education and coordination activities.	E
5.18 There is evidence that the center develops and supports public education and awareness.	E
5.19 There is evidence of a functioning PI process in the center that:	
b. Has clearly stated goals and objectives.	E
c. Develops standards of care.	E
d. Has a process to credential trauma providers.	D
e. Has explicit quality indicators and filters.	E
f. Has a peer review process including pre-hospital providers.	E
g. Has a method for comparing patient outcomes with computed survival probability.	E
h. Autopsy information on all trauma deaths.	D
5.20 The center participates in the statewide quality review process.	E

Level I & II Pediatric Trauma Center

Designation Criteria for Level I and II Pediatric Trauma Center

Criteria for designation of Level I & II pediatric trauma centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.* Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level I or II pediatric trauma center in Idaho.

Criteria Element	Level
1.1 Pediatric trauma centers meet the same resource requirements as adult trauma centers in addition to pediatric resource requirements.	I, II
1.2 A Level I pediatric trauma center annually admits 200 or more injured children younger than 15 years.	I
1.3 A Level II pediatric trauma center annually admits 100 or more injured children younger than 15 years.	II
1.4 A pediatric trauma center has a pediatric trauma program manager or coordinator.	I, II
1.5 A pediatric trauma center has a pediatric trauma registrar.	I, II
1.6 The pediatric trauma program manager or coordinator is dedicated to the pediatric trauma service.	I
1.7 A pediatric trauma center has a pediatric trauma PIPS program.	I, II
1.8 A pediatric trauma center has all of the following programs: pediatric rehabilitation; child life and family support programs; pediatric social work and child protective services; pediatric injury prevention and community outreach programs; and pediatric trauma education programs.	I, II
1.9 A pediatric trauma center has identifiable pediatric trauma research.	I
1.10 A Level I pediatric trauma center has at least 2 surgeons, board-certified or board-eligible in pediatric surgery by the American Board of Surgery.	I
1.11 A Level I pediatric trauma center has at least 1 board-certified or board-eligible orthopedic surgeon who has had pediatric fellowship training.	I
1.12 A Level I pediatric trauma center has at least 1 board-certified or board-eligible neurosurgeon who has had pediatric fellowship training.	I
1.13 A Level I pediatric trauma center has at least 1 additional board-certified or board-eligible orthopedic surgeon with demonstrated skills and interest in the care of pediatric trauma patients.	I
1.14 A Level I pediatric trauma center has at least 1 additional board-certified or board-eligible neurosurgeon with demonstrated skills and interest in the care of pediatric trauma patients.	I
1.15 A Level I pediatric trauma center has at least 2 physicians who are board-certified or board-eligible in pediatric critical care medicine (pediatric or surgical).	I

1.16 A Level I pediatric trauma center has at least 2 physicians board-certified or board-eligible in pediatric emergency medicine.	I
1.17 Individuals who provide pediatric care in the pediatric ICU are credentialed by the hospital to provide pediatric trauma care in their respective trauma areas.	I, II
1.18 Individuals who provide pediatric care in the pediatric area of the ED are credentialed by the hospital to provide pediatric care in the ED.	I, II
1.19 A Level II pediatric trauma center has at least 1 surgeon who is board-certified or board-eligible in pediatric surgery.	II
1.20 A Level II pediatric trauma center has at least 1 additional board-certified or board-eligible orthopedic surgeon with interests and skills in pediatric surgery.	II
1.21 A Level II pediatric trauma center has at least 1 board-certified or board-eligible neurosurgeon with interests and skills in pediatric surgery.	II
1.22 The pediatric trauma medical director is board-certified or board-eligible in general surgery.	I, II
1.23 The pediatric trauma medical director is board-certified or board-eligible in pediatric surgery.	I
1.24 There are non-pediatric-trained surgeons serving on the pediatric panel with proper qualifications:	I, II
a. credentialed by the hospital to provide pediatric trauma care;	
b. members of the adult trauma panel;	
c. the pediatric trauma medical director has agreed to their having sufficient training and experience in pediatric trauma care; and	
d. their performance has been reviewed by the pediatric PIPS program.	
1.25 Trauma surgeon attendance in the ED for the highest level of activations is documented to be greater than 80%.	I, II
1.26 There is a mechanism for documenting surgeon presence in the operating room.	I, II
1.27 The program offers specialty-specific pediatric education for the specialists.	I, II
1.28 There is a pediatric trauma service led by the trauma medical director.	I, II
1.29 All hospitals seeking verification as an adult and pediatric trauma center meet criteria for the verification level sought in each type of center.	I, II
1.30 Trauma surgeons in adult trauma centers that admit 100 or more injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.	I, II
1.31 The adult trauma center that admits 100 or more injured children annually has all of the following: a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.	I, II
1.32 The adult trauma center that admits fewer than 100 injured children annually reviews care of injured children through the PIPS program.	I, II
1.33 There is a multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from pediatric/general surgery, orthopedic surgery, neurosurgery, emergency medicine, critical care medicine, and anesthesia that reviews selected deaths, complications, and sentinel events to identify issues and appropriate responses.	I, II
1.34 Attendance by the required representatives to at least 50% of the multidisciplinary peer review meetings is documented.	I, II

1.35 The pediatric trauma medical director and the liaisons from neurosurgery, orthopedic surgery, emergency medicine, and critical care medicine have adequate pediatric trauma CME.	I, II